

## INTESTINAL INTUSSUSCEPTION COMPLICATING TYPHOID FEVER.

REPORT OF A CASE OF INTESTINAL INTUSSUSCEPTION WITH MESENTERIC  
THROMBI OCCURRING DURING FIRST WEEK OF TYPHOID FEVER.

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THE following case, from its comparative rarity, its serious import, and its difficulties in diagnosis has seemed to the writer worthy of being placed on record with the few others of similar character which have been reported in the literature.

The patient was a female, age 20, of fairly good family history and previous good health, with the exception of a slight tendency to diarrhoea during previous three months. On August 17, she complained of abdominal pain followed by vomiting. Cathartic pills were administered by one of the family and on the following day castor oil. Diarrhoea promptly ensued and continued. An excellent general practitioner was called on the third day of the illness and found the patient with a temperature of  $102^{\circ}$ , pulse 100; patient vomiting, vomitus being of a biliary character, bowels moving at intervals of two or three hours, slightly distended abdomen with tenderness in the right lower quadrant. These symptoms increased in severity, temperature reaching  $105^{\circ}$  F. (mouth) on the afternoon of the fourth and fifth days.

The writer saw patient with visiting physicians on the morning of the sixth day. The patient presented at that time the facies of typhoid fever. The tongue was protruded with slight tremor, and was coated white, pupils dilated, reacted to light, cheeks were flushed, there was marked restlessness and general discomfort. Physical examination of heart and lungs negative except a few râles at the base of the right lung. The abdomen was moderately distended, spleen not palpably enlarged, no roseola spots discovered, marked tenderness one inch to the mesial side of McBurney's point. Rigidity of right rectus muscle fairly pro-

nounced. Digital examination of rectum revealed tender but movable mass in right pelvic fossa. Mass lacked doughy feel of an abscess. Pulse 110, temperature 103.6° F. (mouth), 104° (rectal). Examination of urine negative. No blood examination made.

A tentative diagnosis of probable enteric fever of sudden onset, accompanied by a peritoneal lesion in the ileocaecal region, probably appendicitis.

As the nearest hospital was twenty miles distant, removal of the patient was considered unwise, and the operation was performed at her lodgings. Under ether anaesthesia a three-inch incision was made at the outer edge of the right rectus. The peritoneum was found injected, the pelvis containing a considerable amount of straw-colored peritonitic fluid. The examining finger at once encountered a cylindrical mass in the right pelvic fossa suggestive of an enormously swollen appendix. This proved to be a mesenteric thrombus. The ileum was found invaginated in the caecum a distance of 4 to 6 cm. The ileum as it approached the caecum was markedly oedematous and thickened, the appendix was thickened, the serosa much injected. Two large thrombi were removed from the mesentery, the intussusception was partially reduced by manipulation, the appendix removed, the ileum, close to the caecal junction, was sutured to the peritoneal wound.

This procedure was adopted for the following reasons: first, there was neither gangrene of the intestine nor complete obstruction to demand resection; second, by immobilizing the ileum we prevented further intussusception; and third, by leaving it in the peritoneal wound it could be inspected and opened if obstruction should occur.

A split tubular drain carrying gauze was introduced to the pelvis and a cigarette drain to the seat of operation. The balance of the wound was closed by tier sutures.

The operation was followed by but slight shock. The vomiting and acute abdominal symptoms subsided at the end of twenty-four hours, the patient then going on through well marked typhoid with characteristic diarrhoea persisting for several days, roseola spots appearing during second week, mild delirium at night. During the third week the urine contained albumin and gave a positive Diazo reaction. The Widal blood test showed a positive reaction.

There was a moderate amount of seropurulent drainage from the wounds during the first two weeks. At the end of four weeks the wound was practically healed. The patient's temperature reached normal between the third and fourth weeks, and now, at the seventh week, convalescence is entirely established.

*Bibliography.*—George G. Ross and Henry F. Page, of the German Hospital of Philadelphia, in an article on "Acute Intussusception in the Adult," published in the *American Journal of Medical Sciences*, December, 1907, report two cases of intussusception occurring during the course of enteric fever,—one, a male of seventeen, the intussusception occurring on the twenty-sixth day; the other a female, aged nineteen, intussusception occurring on the nineteenth day. Both cases were operated upon without resection, and both recovered. The article further refers to reports of seven other cases which they have found in literature, two reported by Lieutenant Colonel Jennings in the *British Medical Journal*, 1902, in which the true condition was not discovered until autopsy. Ash reports two cases in the *British Medical Journal*, May 3, 1902, the first being a male of twenty-six, intussusception occurring on the ninth day. Was operated upon and recovered. His second case was discovered at autopsy. Hart and Ashhurst, in the *ANNALS OF SURGERY*, January, 1904, reported that they had seen intussusception occur during an attack of ambulatory typhoid fever. The result is not stated. B. L. Bryant and J. S. Bragg, in the *Medical Record* for November 18, 1905, report a case. The patient was a male, aged twenty-three. Diagnosis of typhoid positive. Intussusception occurred seven days after the patient entered hospital and seventeen days following the onset of prodromal symptoms. Severe abdominal pain and vomiting marked the occurrence of intussusception. Diagnosis of intestinal perforation was made but at operation two hours later intussusception at the ileocaecal junction was found. This and two other intussusceptions in the ileum were reduced. The patient died five hours later from shock.

Of the above nine cases, including that reported by the writer, three were discovered at autopsy, five were operated upon, with four recoveries and one death. Of one the result is not stated.

As laparotomies during typhoid become more common, intussusception will be found undoubtedly more frequently than in the past. At the present time it is a complication to be thought of, and dealt with promptly when encountered.